# MaineHealth

## Strategic Application of Maine's All Payer Database for System Management and Development

Overview for LD1818 Stakeholder Workgroup
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## Practical Applications for Public Data: **Current Uses and Challenges**

### Current

- –Geographic / organizational variation analysis
- ACO attribution modeling and network development
- Network and hospital service area leakage analysis

### **Future**

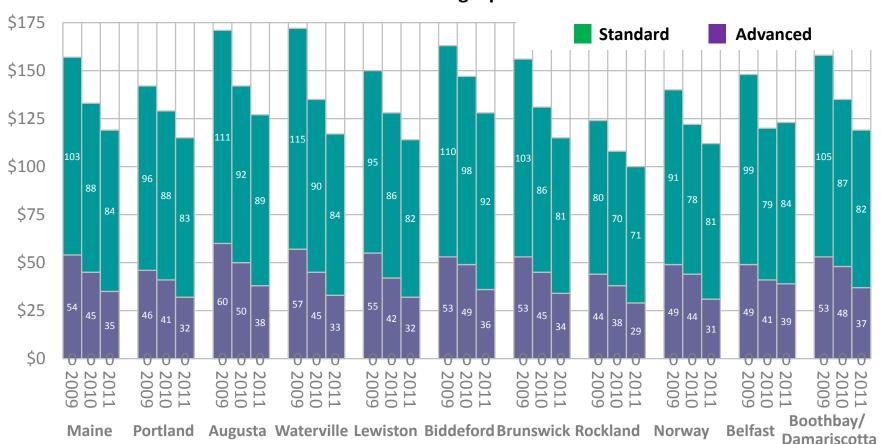
–All of the above, plus ACO Quality and Efficiency Management

## Challenges

- Data complexity: Limited in-house capacity for management & analysis
- -Consistency:
  - Changes in MHDO submission requirements and require complicated "cross-walking" that may compromise year over year trending
  - Reporting of pharmacy and behavioral health claims inconsistent across payers – compromises comparison
- -Timely Availability

# **Example:** Geographic Variation Analysis: Downward Trend in Imaging Utilization. Can we do better?

#### Standardized Values: 2009-2011 average per Commercial Enrollee under 65



# of Commercial Enrollees < 65 (Average 2009-2011): Maine 582,291; Augusta 30,742; Belfast 7,322; Biddeford 38,874; Boothbay/ Damariscotta 7,116; Brunswick 35,095; Lewiston 52,176; Norway 11,069; Portland 145,557; Rockland 20,128; Waterville 28,533

MaineHealth

# **Example:** ACO Patient Population Analysis: Cost and Quality of Care for Medicare Patients Attributed to the MaineHealth ACO.

	Comparison	n of Attribute	d Member Cos	t and Quality	Measures			
	•		Plus Method fo					
Co	ntinuously E	ligible, Cover	ed and Stable	Medicare Mei	mbers in 2006	6		
HSA	Belfast	Biddeford	Boothbay / Damariscotta	Brunswick	Lewiston	Norway	Portland	Rockland
Total Members Attributed	830	5,557	2,090	2,773	1,252	2,215	12,543	3,270
Total Enrollees	830	5,557	2,090	2,773	1,252	2,215	12,543	3,270
Average Months per Member	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Demographics								
Average Age	74	73	75	72	69	72	72	73
% Male	40%	42%	44%	41%	44%	44%	43%	43%
Average CMS Risk Score (Natl Average	1.13	1.17	1.20	1.09	1.21	1.13	1.18	1.16
% w/ any Medicaid Coverage in Period	41%	38%	26%	28%	51%	47%	38%	34%
Risk Adjusted Cost (Allowed Amount)								
Cost as CMS will calculate it	\$5.645.425	\$43,229,696	\$16.513.133	\$22,413,046	\$11.301.969	\$16,485,394	\$107,588,079	\$26.141.432
Cost as CMS will calculate it, per enro		\$7,779	\$7,901	\$8,083	\$9,027	\$7,443	\$8,578	\$7,994
Quality Measures				•			• •	
Total Effective Care								
	61%	65%	65%	62%	63%	61%	66%	64%
Total Diabetes Care	61% 55%	65% 75%		62% 61%	63% 67%		66% 76%	64% 58%
Total Diabetes Care Total Cardiovascular Conditions Care			67%				***	
	55%	75%	67% 53%	61%	67%	60%	76%	58%
Total Cardiovascular Conditions Care	55% 51%	75% 75%	67% 53% 21%	61% 55%	67% 62%	60% 55%	76% 74%	58% 56%
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care	55% 51% 25%	75% 75% 48%	67% 53% 21% 18%	61% 55% 59%	67% 62% 60%	60% 55% 48%	76% 74% 49%	58% 56% 41%
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care	55% 51% 25% 21%	75% 75% 48% 24%	67% 53% 21% 18% 31%	61% 55% 59% 17%	67% 62% 60% 29%	60% 55% 48% 19%	76% 74% 49% 25%	58% 56% 41% 20%
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care Number of Opportunities	55% 51% 25% 21% 19%	75% 75% 48% 24% 34% 68%	67% 53% 21% 18% 31%	61% 55% 59% 17% 34% 67%	67% 62% 60% 29% 18% 66%	60% 55% 48% 19% 25%	76% 74% 49% 25% 36%	58% 56% 41% 20% 27%
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care	55% 51% 25% 21% 19%	75% 75% 48% 24% 34%	67% 53% 21% 18% 31%	61% 55% 59% 17% 34%	67% 62% 60% 29% 18%	60% 55% 48% 19% 25% 69%	76% 74% 49% 25% 36%	58% 56% 41% 20% 27% 71%
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care Number of Opportunities Total Effective Care Total Diabetes Care	55% 51% 25% 21% 19% 70%	75% 75% 48% 24% 34% 68% 13,011	67% 53% 21% 18% 31% 71% 4,418	61% 55% 59% 17% 34% 67% 6,417	67% 62% 60% 29% 18% 66%	60% 55% 48% 19% 25% 69% 5,228	76% 74% 49% 25% 36% 67% 28,657 6,768	58% 56% 41% 20% 27% 71% 6,996
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care Number of Opportunities Total Effective Care Total Diabetes Care Total Cardiovascular Conditions Care	55% 51% 25% 21% 19% 70% 1,886 404 67	75% 75% 48% 24% 34% 68% 13,011 3,012 431	67% 53% 21% 18% 31% 71% 4,418 856 115	61% 55% 59% 17% 34% 67% 6,417 1,424	67% 62% 60% 29% 18% 66% 3,037 740	60% 55% 48% 19% 25% 69% 5,228 1,200	76% 74% 49% 25% 36% 67% 28,657 6,768 936	58% 56% 41% 20% 27% 71% 6,996 1,376 211
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care Number of Opportunities Total Effective Care Total Diabetes Care Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care	55% 51% 25% 21% 19% 70% 1,886 404 67	75% 75% 48% 24% 34% 68% 13,011 3,012 431 65	67% 53% 21% 18% 31% 71% 4,418 856 115	61% 55% 59% 17% 34% 67% 6,417 1,424 197	67% 62% 60% 29% 18% 66% 3,037 740 104	60% 55% 48% 19% 25% 69% 5,228 1,200 173 27	76% 74% 49% 25% 36% 67% 28,657 6,768 936 155	58% 56% 41% 20% 27% 71% 6,996 1,376 211
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care  Number of Opportunities  Total Effective Care Total Diabetes Care Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care	55% 51% 25% 21% 19% 70% 1,886 404 67 8	75% 75% 48% 24% 34% 68% 13,011 3,012 431 65 986	67% 53% 21% 18% 31% 71% 4,418 856 115 14	61% 55% 59% 17% 34% 67% 6,417 1,424 197 34	67% 62% 60% 29% 18% 66% 3,037 740 104 15	50% 55% 48% 19% 25% 69% 5,228 1,200 173 27 383	76% 74% 49% 25% 36% 67% 28,657 6,768 936 155 2,165	58% 56% 41% 20% 27% 71% 6,996 1,376 211 32 413
Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care Total Medication Management Care Total Respiratory Conditions Care Total Preventive Care  Number of Opportunities Total Effective Care Total Diabetes Care Total Cardiovascular Conditions Care Total Musculoskeletal Conditions Care	55% 51% 25% 21% 19% 70% 1,886 404 67	75% 75% 48% 24% 34% 68% 13,011 3,012 431 65	67% 53% 21% 18% 31% 71% 4,418 856 115	61% 55% 59% 17% 34% 67% 6,417 1,424 197	67% 62% 60% 29% 18% 66% 3,037 740 104	60% 55% 48% 19% 25% 69% 5,228 1,200 173 27	76% 74% 49% 25% 36% 67% 28,657 6,768 936 155	58% 56% 41% 20% 27% 71% 6,996 1,376 211

# **Example:** ACO Development: Assessing Network Composition Scenarios

		•			<u> </u>		t Measures	<u> </u>				
Using Final CMS ACO Attribution Methodology  Medicare Members with Both A & B Coverage in 2006												
	Maine Health Employed PCP	Maine Health Employed SPEC	Other PHO PCP	Other PHO SPEC	Group 1	Group 2	Affiliate 1	Affiliate 2	Affiliate 3	Other Area 1	Other Area 2	Other Area
Total Members Attributed	14,204	3,909	12,145	3,394	5,042	6,383	2,224	612	1,519	838	2,669	5,180
Total Enrollees	14,006	3,850	11,936	3,317	4,966	6,306	2,198	601	1,486	826	2,627	5,08
Average Months per Member	11.8	11.8	11.8	11.7	11.8	11.9	11.9	11.8	11.7	11.8	11.8	11.8
Providers <sup>1</sup> w/ Attributed Members	83	138	65	207	34	32	13	23	19	12	33	85
Members per Provider	171	28	187	16	148	199	171	27	80	70	81	6′
Demographics												
Average Age	73	70			73	74	73		70		72	
% Male	42%	51%	41%	47%	40%	40%	40%	54%	42%	47%	42%	449
Average CMS Risk Score (Natl Average = 1.0)	1.15	1.09			1.12	1.06	1.02		1.29	1.10	1.23	
% w/ any Medicaid Coverage in Period	36%	41%	42%	39%	31%	23%	25%	51%	50%	44%	49%	25%
Actual Cost (Allowed Amount)												
Total Cost, nothing removed	\$105,206,075	\$26,378,304	\$92,214,689	\$25,522,825	\$36,581,769	\$43,727,012	\$15,170,943	\$5,939,078	\$13,503,911	\$4,844,493	\$20,139,079	\$35,726,218
Total Cost, nothing removed, per enrollee	\$7,511	\$6,852	\$7,726	\$7,696	\$7,367	\$6,934	\$6,903	\$9,883	\$9,090	\$5,864	\$7,666	\$7,026
Outlier Cost (using \$100K)	\$8,929,932	\$1,312,684	\$7,495,387	\$3,472,003	\$2,852,239	\$3,558,460	\$1,144,037	\$690,855	\$1,188,883	\$101,299	\$1,248,617	\$2.581.757
Number of Outliers	59	9		. , ,	16	22			5		10	
		*******	<b>^</b>	****	****	<b>^</b> + - +	****	<b>A=</b> 0.40.000	<b>^</b>	<b>*</b>	<b>^</b>	
Cost without Outliers Cost without Outliers, per enrollee	\$96,276,143 \$6,902	\$25,065,619 \$6,526	. , ,	\$22,050,822 \$6,694	\$33,729,530 \$6,814	\$40,168,553 \$6,392	\$14,026,906 \$6,403	\$5,248,222	\$12,315,029 \$8,317	\$4,743,194 \$5,749	\$18,890,462 \$7,218	
Cost without Outliers, per enrollee	\$6,902	Φ0,320	\$7,129	\$6,694	Ф0,014	<b>Ф</b> 0,392	\$6,403	φο,ουσ	φο,317	\$5,749	Φ1,∠10	\$0,54
Risk Adjusted Cost (Allowed Amount)												
Cost as CMS will calculate it	\$87,628,572	\$24,375,471	\$74,701,936	\$22,095,740	\$31,521,205	\$40,505,371	\$14,822,085	\$4,252,168	\$9,599,156	\$4,442,804	\$15,342,939	\$32,249,90
Cost as CMS will calculate it, per enrollee	\$6,282	\$6,347	\$6,286	\$6,708	\$6,368	\$6,445	\$6,766	\$7,134	\$6,483	\$5,385	\$5,863	\$6,365
2												
Pharmacy Cost <sup>2</sup> (Allowed Amount)	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A	NI/A
Total Enrollees w/ RX Coverage Total Cost, nothing removed	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Total Cost, nothing removed, per enrollee	N/A N/A	N/A N/A	N/A	N/A	N/A N/A	N/A N/A	N/A	N/A N/A	N/A N/A	N/A _	N/A N/A	N/A _

## Practical Applications for Public Data: Current Uses and Challenges

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### **Future**

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